

---

# A New Species of *Bulbophyllum* (Orchidaceae) from Yunnan, China

Jin Xiao-Hua

Herbarium, Institute of Botany, Chinese Academy of Sciences, Nanxinchun 20, Beijing 100093, People's Republic of China. xiaohuajin@ibcas.ac.cn, and Key Laboratory for Plant Biodiversity and Biogeography, KIB/CAS, Kunming 650204, People's Republic of China.  
xiaohuajin@mail.kib.ac.cn

---

**ABSTRACT.** *Bulbophyllum dulongjiangense* X. H. Jin, a new species from Yunnan, China, is described and illustrated. The new species is related to *B. gyrochilum* Seidenfaden but differs from it by having larger flowers, longer lateral sepals to 2.3 cm with the dorsal sepal to 1.4 cm, falcate column stelids to 1.5 mm, and lip with two dorsal ridges.

**Key words:** *Bulbophyllum*, China, Orchidaceae, sect. *Desmosanthes*, Yunnan.

*Bulbophyllum* Thouars is an orchid genus comprising about 1000 species widely extending from tropical America, Africa, Madagascar, and mainland Asia to Australasia. There are about 100 species in China and about 65 in Yunnan (Tsi, 1999; Li, 2003). During fieldwork along the Dulong River in northwest Yunnan, a new species of *Bulbophyllum* was found.

***Bulbophyllum dulongjiangense*** X. H. Jin, sp. nov.

**TYPE:** China. Yunnan: Gongshan Co., Dulongjiang, Dandanlika Mts., 4 Nov. 2004, X. H. Jin 6479 (holotype, KUN; isotype, PE). Figure 1.

Haec species habitu *Bulbophyllo gyrochilo* Seidenfaden subsimilis, sed floribus majoribus, sepalis longioribus, sepalo dorsali multo brevioribus quam sepalis lateralibus, stelidiis longioribus et falcatis, labio cristis extensis ab basi ad apicem differt.

Epiphytic on tree; rhizome pendent and free-hanging with roots at its base; roots terete, arising from nodes of pseudobulbs and rhizomes, running along rhizome; pseudobulbs cylindrical, spaced closely along the rhizome, adpressed, pointing toward the apex of the rhizome at an acute angle to the rhizome, 1.5–2 cm, 0.5–0.8 cm diam. Leaf 1 of each pseudobulb, lanceolate 3.5 × 0.9–1 cm, acute, slightly oblique. Inflorescences arising from pseudobulb base, sub-umbelliform, 0.8 cm, shorter than pseudobulbs, 10- to 15-flowered, with 2 to 3 membranous infertile bracts, 5 mm; fertile bracts lanceolate, 0.7–0.8 mm. Ovary with pedicel 0.5–0.6 cm; flowers pale yellow, patent; dorsal sepal linear, caudate, 1.2–1.4 × 0.1 cm; lateral sepals

linear, oblique at base, caudate, 2.1–2.3 × 0.2 cm; petals oblong, acuminate, 1-veined, 1.9–2.1 × 1.3–1.5 mm; lip yellow, oblong, fleshy, pubescent at margin, 2 dorsal ridges ranging from base to tip, 2–2.2 × 0.9–1 mm; column stout, winged, 1–1.1 mm; column stelids falcate, 1.5 mm; column foot 1 mm; pollinia 2; anther cap entire, dorsal ridged. Fruits not seen.

**Distribution and phenology.** This new species is epiphytic on branches and tree trunks on the eastern slope of the Dandanlika Mountains. Up to now, only one population of about 150 clusters has been found. Flowering October to November.

*Bulbophyllum dulongjiangense* is closely related to *B. gyrochilum* from Doi Sutep and Chong Tha, Thailand. Both have pendent, free-hanging rhizomes, roots extending along the rhizomes, and short-scaped sub-umbellate inflorescences. However, they can be readily distinguished by their flower size, length of sepals, and callus on lip. *Bulbophyllum dulongjiangense* has larger flowers, dorsal sepal to 1.4 cm, lateral sepals to 2.3 cm, and lip with two dorsal ridges, whereas *B. gyrochilum* has smaller flowers, sepals of equal length or the lateral sepals slightly longer (about 4–5 mm), and the lip is only somewhat papillose.

Seidenfaden (1979) stated that it was difficult to arrange a natural sectional system for *Bulbophyllum gyrochilum*; this is also true of its allied species, *B. dulongjiangense*. The new species has a pendent, free-hanging rhizome and roots extending along the rhizome from the nodes of the pseudobulb and the rhizome. This habit is similar to that of plants in *Bulbophyllum* sect. *Polyblepharon* Schlechter. At the same time, its sub-umbellate inflorescences and caudate sepals are reminiscent of those of the plants in *Bulbophyllum* sect. *Cirrhopetalum* (Lindley) P. Royen. Despite this, we assign the new species to *Bulbophyllum* sect. *Desmosanthes* (Blume) J. J. Smith based on its sub-umbellate and many-flowered inflorescences and free lateral sepals.



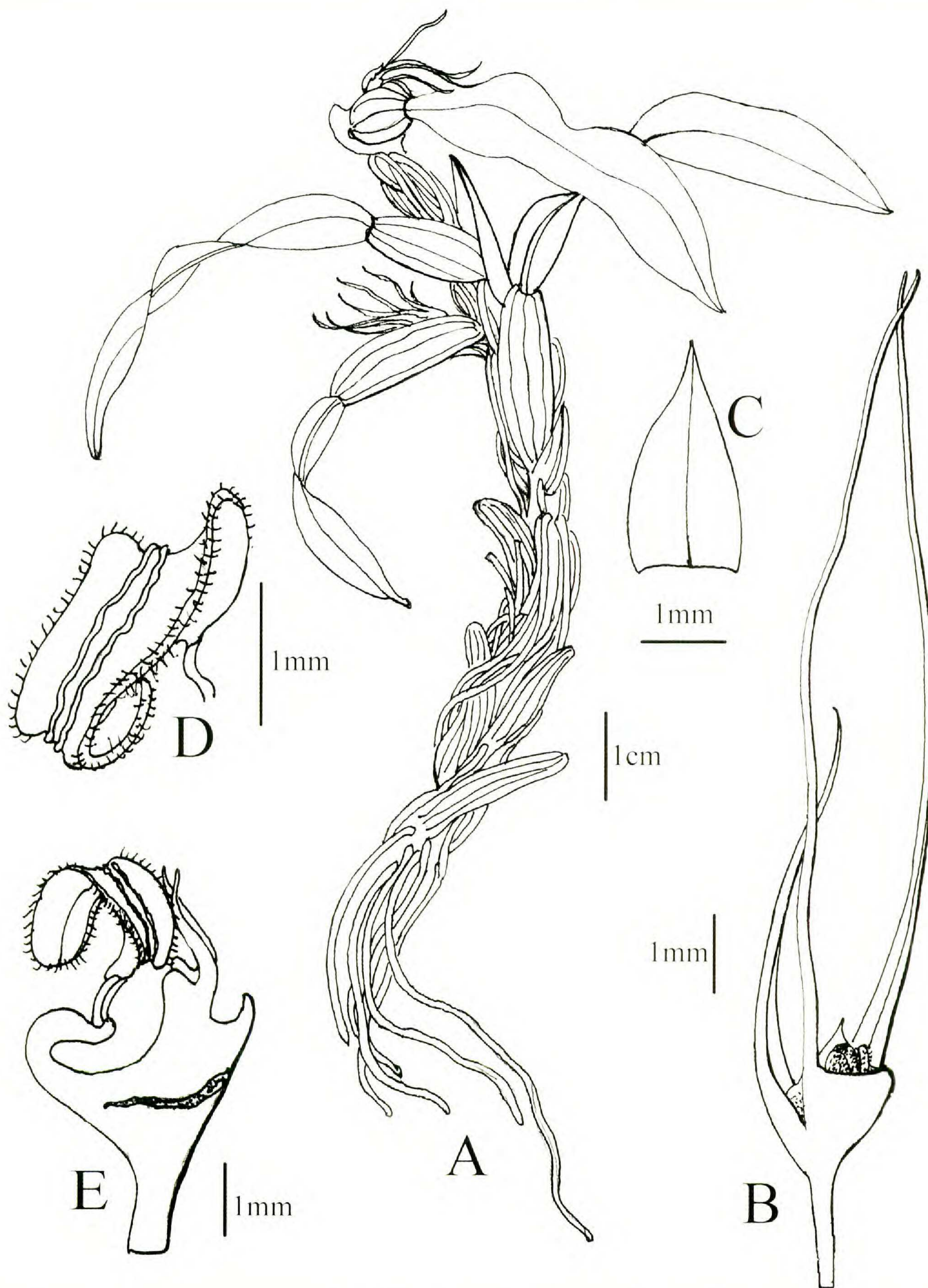


Figure 1. *Bulbophyllum dulongjiangense* X. H. Jin. —A. Habit. —B. Lateral view of flower. —C. Petal. —D. Decurved lip. —E. Lateral view of column and lip. Drawn from the holotype *Jin 6479*, KUN.

*Acknowledgments.* This research was funded by the Ministry of Science and Technology of China (2005DKA21006). We thank Eduardo Borba and an anonymous reviewer for their critical comments on the manuscript. We are grateful to Victoria C.

Hollowell for editorial advice and Ling Wang for the excellent illustration. We are indebted to the officials of Chinese Forest Bureau and Yunnan Forest Bureau for their kind help during the fieldwork.



---

Literature Cited

- Li, H. 2003. *Bulbophyllum*. Pp. 666–714 in H. Li (editor), *Flora Yunnanica*, Vol. 14. Science Press, Beijing.
- Seidenfaden, G. 1979. Orchid genera in Thailand *Bulbophyllum* Thou. *Dansk Bot. Ark.* 33(3): 80–82.
- Tsi, Z. H. 1999. *Bulbophyllum*. Pp. 164–257 in Z. H. Tsi (editor), *Flora Reipublicae Popularis Sinicae*, Vol. 19. Science Press, Beijing.